

sub
bl

--19. A dry microorganism culture which comprises at least one microorganism species in carrier-bound form, wherein the culture is present in the form of particles which

- have a particle size of at least about 0.1 mm and
- comprise from about 10^8 to 10^{12} cfu/g of at least one microorganism species; and
- are compressed.

20. A microorganism culture as claimed in claim 19, wherein the particles have been compressed under the action of a linear force from about 5 to 15 kN/cm or a pressure from about 90 to 160 MPa.

21. A microorganism culture as claimed in claim 19, wherein the compressed particles comprise compacted broken material having a diameter of from about 0.1 mm to about 2 mm.

22. A microorganism culture as claimed in claim 19, wherein the compressed particles comprise tablets having a diameter of from about 2 to 50 mm and a ratio of diameter to thickness of from about 1:0.1 to about 10:1.

23. A microorganism culture as claimed in claim 19, wherein it comprises, a further component, an effervescent additive.

24. A microorganism culture as claimed in claim 19, wherein, as carrier, it comprises at least one matrix material for embedding the microorganism cells with or without at least one further cell-stabilizing additive.

25. A microorganism culture as claimed in claim 19, wherein it comprises at least one lactic-acid-producing bacterial species.

26. A microorganism culture as claimed in claim 25, wherein the bacterial

species is selected from bacteria of the genus Lactobacillus sp.

sub B2

27. A process for producing a dry microorganism culture, comprising at least one microorganism species in carrier-bound form, which comprises

- dissolving or suspending at least one substance suitable for forming a carrier in a liquid comprising at least one microorganism species,
- drying the resultant mixture in a spray-dryer, for the spray-drying use being made of a conditioned dried gas having a dew point of less than about +50°C, heated to a temperature in the range of above about 80°C, and
- removing the dried material from the spray dryer, this dried material having an exit temperature of from about 45 to 75°C.

10 28. A process as claimed in claim 27, wherein, in a further stage d), the dry material is subjected to a further drying at a temperature in the range from about 15 to 50°C in a gas atmosphere or in vacuo and/or at least one desiccant is added.

1/ 29. A process as claimed in claim 27, wherein, as dry material, a powder concentrate having a content of viable microorganisms of from about $5 \cdot 10^8$ to $1 \cdot 10^{12}$ cfu/g is obtained.

sub B3

30. Dry compressed microorganism culture according to claim 19, obtained from a powder concentrate of microorganism culture dried in a spray-dryer, for the spray-drying use being made of a conditioned dried gas having a dew point of less than about +50°C, heated to a temperature in the range of above about 80°C.

sub C3

31. A process for preparing a dry microorganism culture as claimed in claim 19, which comprises

- producing a powder concentrate of the microorganism culture by carrier-bound

ii) spray-drying, carrier-bound freeze-drying or carrier-bound fluidized-bed drying,
with or without admixing the powder concentrate with one or more coformulants
and
iii) compacting or tabletting this mixture.

14 32. A process as claimed in claim 31, wherein the compacted powder
concentrate from stage iii) is broken, with or without classification.

~~Subct 4~~ 33. A process for preparing a dry agglomerated microorganism culture, which
comprises
i) preparing a powder concentrate of the microorganism culture by carrier-bound
spray-drying, carrier-bound freeze drying or carrier-bound fluidized--bed drying,
ii) with our without admixing the powder concentrate with one or more coformulants
and
iii) agglomerating this mixture.

34. A process as claimed in claim 31, wherein the spray-drying is performed in
a spray-dryer in which a conditioned dried gas is employed having a dew point of less
than about +50°C, heated to a temperature in the range of above about 80°C.

~~Subct 5~~ 35. A starter culture for foodstuffs and feedstuffs comprising a microorganism
culture as claimed in claim 19, or prepared by a process for producing a dry
microorganism culture, comprising at least one microorganism species in carrier-bound
form, which comprises

a) dissolving or suspending at least one substance suitable for forming a carrier in
a liquid comprising at least one microorganism species,
b) drying the resultant mixture in a spray-dryer, for the spray-drying use being

made of a conditioned dried gas having a dew point of less than about +50°C, heated to a temperature in the range of above about 80°C, and removing the dried material from the spray dryer, this dried material having an exit temperature of from about 45 to 75°C.

36. A foodstuff or feedstuff obtainable by using a microorganism culture as

claimed in claim 19 or prepared by a process for producing a dry microorganism culture, comprising at least one microorganism species in carrier-bound form, which comprises

- a) dissolving or suspending at least one substance suitable for forming a carrier in a liquid comprising at least one microorganism species,
- b) drying the resultant mixture in a spray-dryer, for the spray-drying use being made of a conditioned dried gas having a dew point of less than about +50°C, heated to a temperature in the range of above about 80°C, and
- c) removing the dried material from the spray dryer, this dried material having an exit temperature of from about 45 to 75°C.

37. A process as claimed in claim 33, wherein the spray-drying is performed in a spray-dryer employing a conditioned dried gas having a dew point of less than about +50°C, heated to a temperature in the range of above about 80°C.--